

Scientific Program



**Sunday
September 30**

14:30-16:00

Sponsored Symposium – NOVARTIS

17:00-17:30

Opening Ceremony

President & Program Committee Chairs Welcome the Participants

17:30-19:00

Plenary Session

Chair: Sergio Jimenez

17:30-18:00 S1* The Role and Efforts of the NIH/NIAMS in Osteoarthritis and Cartilage Research
Stephen Katz

18:00-19:00 S2 A Retrospective of Osteoarthritis
Henry Mankin

19:00-20:30

Opening Reception

**Monday
October 1**

8:45-9:00

Opening Remarks

Sergio Jimenez

9:00-10:30

Plenary Session

Chairs: Sergio Jimenez & Frank Wollheim

9:00-9:15 1** Morphological Validation of Diffraction Enhanced Imaging for Articular Cartilage
9:15-9:30 2 Osteoarthritis Research International Hand OA Task Force: Design and Conduct on Clinical Trials on Osteoarthritis (OA) of the Hand
9:30-9:45 3 Increased Life-Span of Osteoarthritic Chondrocytes by Exogenous Expression of Telomerase
9:45-10:00 4 Effect of Agonists of Peroxisome Proliferator-Activated Receptor γ on Cartilage Degradation and Matrix Metalloproteinase Production
10:00-10:15 5 Synovitis Predicts the Arthroscopic Progression of Medial Tibiofemoral Knee Osteoarthritis
10:15-10:30 6 Macrophages Activated by TGFB Promote Osteophyte Formation

10:30-11:00

Break

11:00-12:00

Concurrent Sessions

Biochemistry

Chair: Klaus Kuettner

11:00-11:15 7 A Novel Protein-Binding Site (AGRE) in Human Collagenase-3 Proximal Promoter Region is involved in Repression of Transcription
11:15-11:30 8 Comparison of Homeostasis of the Extracellular Matrix by Phenotypically Stable Cultured Human Chondrocytes from Normal and Osteoarthritic Cartilage of the Same Knee
11:30-11:45 9 The Effects of Calcium Pentosan Polysulfate on Synovial Pathology, Nitric Oxide Synthase Expression and Hyaluronan Production in an Ovine Model of Osteoarthritis
11:45-12:00 10 The Cartilage/Bone Interface Is Permeable to Saline Under Physiologic Articular Pressures

Models

Chair: Dick Heinegard

11:00-11:15 11 The Cartilage Degeneration After Immobilization in p53 (+/+) and p53 (-/-) Mice Knees
11:15-11:30 12 A Sheep Model of Patellofemoral Osteoarthritis
11:30-11:45 13 The *In Vitro* Dual Inhibition of Cyclooxygenase and Lipoxygenase by ML-3000 Reduces the Progression of Experimental Osteoarthritis: Suppression of Collagenase-1 and Interleukin-1 β Synthesis
11:45-12:00 14 The Importance of Bone Morphology in the Initiation & Progression of Spontaneous Osteoarthritis in the Guinea Pig

*S indicates spoken presentation: no abstract included.

**These numbers appear in the Abstracts section as PP1, PP2, etc to indicate Podium Presentations.

12:00-13:00		Break for Lunch
13:00-15:00		Biologic Repair – Novel Approaches to Joint Repair Chair: Peter Ghosh & Ernst Hunziker
13:00-13:30	S3	Use of Mesenchymal Stem Cells to Regenerate Cartilage and Bone Arnold Caplan
13:30-14:00	S4	Potential and Challenges of Biologic Approaches to Cartilage Repair Ernst Hunziker
14:00-14:30	S5	Tissue Engineering Anthony Ratcliffe
14:30-15:00		Panel Discussion
15:00-15:30		Break
15:30-17:00		Concurrent Sessions
		Epidemiology, Clinical and Therapy Chair: Marc Hochberg
15:30-15:45	15	Assessment of Dysplastic Hip Joint Using Delayed Gadolinium Enhanced MRI of Cartilage (dGEMRIC)
15:45-16:00	16	Assessment of Gag Concentration of Articular Cartilage in Knee OA Using Contrast-Enhanced MRI
16:00-16:15	17	A Palaeopathological Study of Osteoarthritis
16:15-16:30	18	Identification of Multipotential Mesenchymal Progenitor Cells in Normal and Osteoarthritic Human Articular Cartilage
16:30-16:45	19	Effect of Bisphosphonate on Cartilage Metabolism Assessed by a Newly Developed Assay for Collagen TYPE II Degradation
16:45-17:00	20	Towards Standardization of OA Cartilage Histopathology; Reproducibility of Proposed System (The Barcelona Draft)
		Pathophysiology Chair: Stefan Lohmander
15:30-15:45	21	Induction of Apoptosis in Human Chondrocytes by Hydrostatic Pressure
15:45-16:00	22	Nitric Oxide Inhibition of Cartilage Response to Growth Factors
16:00-16:15	23	Hyaluronan Reduces Anti-Fas Induced Apoptosis in Human Osteoarthritis Chondrocytes: Evidence for CD44 and CD54 (ICAM-1) involvement
16:15-16:30	24	ENDOTHELIN-1: A New Catabolic Agent in Human Osteoarthritis
16:30-16:45	25	Differential Regulation of Cytokine-Activated Human Synovial Fibroblast Collagenase-1 (MMP-1) Gene Expression by Prostaglandins of the E and J Series; Role of AP-1 and C/EBP Transcription Factors
16:45-17:00	26	Leukaemia Inhibitory Factor (LIF) Inhibits Glycosaminoglycan Release from Human Articular Cartilage
17:30-19:00		Sponsored Symposia – Merck Human Health
17:30-19:00		Sponsored Symposia – Negma
Tuesday October 2		
8:00-10:00		Post Session A
		*A1-A28 Epidemiology, Clinical, and Therapy A29-A32 Orthopaedics A33-A42 Biochemistry A43-A48 Genetics A49-A53 Markers A54-A60 Imaging A61-A62 Models A63-A74 Pathophysiology
10:00-12:00		OARSI Awards Presentations Chairs: David Eyre & Kusuki Nishioka
10:00-10:30	S6	Future Directions: The Road Ahead Victor Goldberg
10:30-11:00		OARSI Research Award Presentation

*These numbers appear in the Abstracts section as PA1, PA2, etc to indicate Poster Session A.

		Young Investigator Awardee Presentations
11:00-11:15	27	Biglycan and Fibromodulin Double Knock Out Mice Exhibit Collagen Fibril Abnormalities and Gait Impairment and Develop Ectopic Sesamoid Bones and Premature Osteoarthritis in Their Joints
11:15-11:30	28	Stromal Cell-Derived Factor-1 Signalling: A Novel Mechanism of Synovial Induction of Cartilage Degradation in Rheumatoid Arthritis and Osteoarthritis
11:30-11:45	29	<i>In Vivo</i> Interleukin-1 Converting Enzyme Modulation by Nitric Oxide in the Dog Experimental Osteoarthritis Model
11:45-12:00	30	Gene Transfer into the Periosteal Grafts for Articular Cartilage Defects Using Gene Gun System
12:00-13:00		Break for Lunch
13:00-15:00		Identifying the Progressor – “Who Gets the Disease and in Whom Does It Progress” Chairs: Leena Sharma & Roy Altman
13:00-13:30	S7	The Epidemiology of Emergent Osteoarthritis Mary Fran Sowers
13:30-14:00	S8	Biomarkers A. Robin Poole
14:00-14:30	S9	The Role of Imaging Charles Peterfy
14:30-15:00		Panel Discussion
15:00-15:30		Break
15:30-17:00		Concurrent Sessions
		Pathophysiology Chair: Martin Lotz
1:30-15:45	31	Integrin-Mediated Map Kinase Signaling Increases Collagenase-3 (MMP-13) Production By Human Articular Chondrocytes
15:45-16:00	32	Oncostatin M Induces Collagen Degradation In Human Articular Cartilage
16:00-16:15	33	ATP Induced-Prostaglandin E2 Synthesis Is Mediated By ERK1/2 and P38 Map Kinases Via P2Y Receptors In Articular Chondrocytes
16:15-16:30	34	Sequential Cleavage of Aggrecan in Bovine Articular Cartilage by Human Recombinant Aggrecanase Mimics Interleukin-1 Induced Cartilage Turnover
16:30-16:45	35	BMPs Stimulate Cartilage Matrix Gene Expression
16:45-17:00	36	The Protective Effects of Calcium Pentosan Polysulfate on Calcified Cartilage Integrity in the Medical Compartment of Joints of an Ovine Model of Osteoarthritis
		Genetics Chair: Jean-Pierre Pelletier
15:30-15:45	37	Genecalling Expression Analysis in Articular Cartilage
15:45-16:00	38	Association of Heterozygous Hemochromatosis C28Y Gene Mutation With Hand Osteoarthritis
16:00-16:15	39	JAK/STAT But Not ERK1/ERK2 Pathway Mediates IL-6/SIL-6-R Down-Regulation of Collagen TYPE II and Aggrecan Expression in Articular Chondrocytes
16:15-16:30	40	Analysis of the ANK Gene Reveals a Heterozygous Missense Mutation in a French Family With Calcium Pyrophosphate Deposition Disease (CPPDD)
16:30-16:45	41	Gene Transfers Into Joints by Electroporation <i>In Vivo</i>
16:45-17:00	42	Comparison of Two Collagen Mutant Lines That Serve as Models of Early-Onset Osteoarthritis in Human Chondrodysplasia
17:30-19:00		Sponsored Symposia – Pharmacia Corporation
17:30-19:00		Sponsored Symposia – Rottapharm
19:30-21:00		Gala Reception
Wednesday October 3		
8:00-10:00		Poster Session B *B1-B27 Epidemiology, Clinical, and Therapy B29-B32 Orthopaedics B33-B41 Biochemistry B43-B47 Genetics B49-B53 Markers B54-B60 Imaging B61-B62 Models B63-B74 Pathophysiology L1-5 Late Posters

*These numbers appear in the Abstracts section as PB1, PB2, etc to indicate Poster Session B.

10:00-11:30		OARSI Clinical Award Presentation and Plenary Session Chairs: Jean-Yves Reginster & Alan Rubinow
10:00-10:30		OARSI Clinical Award Presentation
		Plenary Session
10:30-10:45	43	The Inheritance of Hand Osteoarthritis in Iceland
10:45-11:00	44	Structure Modifying Study of Hyaluronan (500-730 KDa, HYALGAN) on Osteoarthritis of the Knee
11:00-11:15	45	Collagen II Containing A Cys Substitution For Arg-a1-519: Abnormal Interactions With Collagen IX <i>In Vitro</i> and Alterations in Skeletal Development in Transgenic Mice Expressing The Mutated Human Gene
11:15-11:30	46	Phenyl N-Tert-Butylnitron (PBN), A Non-Toxic Trap of Free Radicals, Inhibits Pro-Inflammatory Cytokine-Mediated Activation of JNK/SAPK and Apoptosis in Human Osteoarthritis Chondrocytes
11:30-12:00		OARSI Business Meeting
13:30-15:00		The Genetics of Osteoarthritis Chairs: Roland Moskowitz & Tim Spector
13:30-14:00	S10	Genetic Epidemiology Tim Spector
14:00-14:30	S11	Osteoarthritis Gene Hunting – The Oxford Experience John Loughlin
14:30-15:00	S12	Update on the Icelandic DECODE Osteoarthritis Project Thorvaldur Ingvarsson
15:00-16:30		New Therapeutic Approaches Chairs: Steven Abrahamson & Larry Moreland
15:00-15:30	S13	Management of Osteoarthritis: Enhancing the Local Musculoskeletal Environment Leena Sharma
15:30-16:00	S14	Inflammation in Osteoarthritis Steven Abramson
16:00-16:30	S15	Pharmacologic Modification of Cartilage Matrix – Sensitive Indicators of Altered Cell Activity John Sandy